

**METHODS FOR PROGRESSIVE ENCODING
AND MULTIPLEXING OF WEB PAGES**

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ABSTRACT

10 The method, system, and program product enable a receiving-side user to speedily obtain
important information in tree-structured documents even if the size of the received tree structure
is large. This is accomplished by setting a node priority with respect to each of nodes of a
tree-structured document. The priority is set based on the basis of the importance of an
information portion presented from the node to a receiving-side user. Node stream generation
means generate a node stream in which nodes and/or subtrees of a tree-structured document to
be transmitted are arranged in sequence according to node priorities. Transmitting means send
15 the node stream to tree-structured document receiving apparatus via a network. In
tree-structured document receiving apparatus, extraction means extract the nodes and/or
subtrees in the node stream according to the sequence of arrangement, and reconstruction means
add the nodes and/or subtrees in the extraction order to the tree-structured document under
reconstruction. Display means display the tree-structured document in the current reconstructed
20 state.